



CONNECTICUT SITING COUNCIL

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September 20, 2013

Robert E. Carberry, Project Manager NEEWS Siting and Permitting Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270

RE: DOCKET NO. 424 - The Connecticut Light & Power Company Certificate of Environmental Compatibility and Public Need for the Connecticut portion of the Interstate Reliability Project that traverses the municipalities of Lebanon, Columbia, Coventry, Mansfield, Chaplin, Hampton, Brooklyn, Pomfret, Killingly, Putnam, Thompson, and Windham, which consists of (a) new overhead 345-kV electric transmission lines and associated facilities extending between CL&P's Card Street Substation in the Town of Lebanon, Lake Road Switching Station in the Town of Killingly, and the Connecticut/Rhode Island border in the Town of Thompson; and (b) related additions at CL&P's existing Card Street Substation, Lake Road Switching Station, and Killingly Substation. Development and Management Plan for Card Street Substation, Lake Road Switching Station, and Killingly Substation.

Dear Mr. Carberry:

At a public meeting of the Connecticut Siting Council (Council) held on September 19, 2013, the Council considered and approved the Development and Management (D&M) Plan submitted for this project on August 1, 2013, for modifications to the Card Street Substation, Lake Road Switching Station and Killingly Substation, with the following conditions:

- 1. CL&P immediately notify the council in any case when an environmental permit is issued to CL&P by a federal and/or state regulatory agency that contains a provision inconsistent with the record in Docket 424;
- CL&P provide the Council with a final report containing all agreements with abutters or other
 property owners regarding special maintenance precautions; significant changes to the D&M
 Plan that have been approved by the Council; locations of special planting and seeding; and
 actual construction cost of the project;
- 3. CL&P provide copies to the Council upon receipt of federal and state regulatory permits; and
- 4. Urgent significant changes requested by CL&P be authorized by Council staff, and that CL&P submit written specifications within 48 hours after the request.

This approval applies only to the D&M Plan submitted on August 1, 2013. Any changes to the D&M Plan require advance Council notification and approval. Furthermore, the Certificate Holder is responsible for reporting requirements pursuant to Regulations of Connecticut State Agencies Section 16-50j-62.



Please be advised that changes that deviations from this plan are enforceable under the provisions of the Connecticut General Statutes § 16-50u. Enclosed is a copy of the staff report on this D&M Plan, dated September 19, 2013.

Thank you for your attention and cooperation.

Very truly yours,

Robert Stein Chairman

RS/CMW/laf

Enclosure:

Staff Report, dated September 19, 2013

c: Parties and Intervenors



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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Docket No. 424
The Connecticut Light and Power Company
Development and Management Plan
Card Street Substation in Lebanon
Lake Road Switching Station in Killingly
Killingly Substation in Killingly
Staff Report
September 19, 2013

Introduction

On August 1, 2013, The Connecticut Light and Power Company (CL&P) submitted a Development and Management (D&M) Plan for the approved modifications to Card Street Substation, Lake Road Switching Station, and Killingly Substation. This D&M Plan is the first of two plans to be submitted to the Connecticut Siting Council (Council) for the Interstate Reliability Project (Interstate). The second plan will address all construction activities for the overhead transmission lines. The D&M Plan was submitted consistent with the Council's Decision and Order (D&O) and Certificate of Environmental Compatibility and Public Need (Certificate) for Interstate dated December 27, 2012.

The Council-approved Connecticut portion of Interstate includes 36.8 miles of new overhead 345-kV electric transmission lines extending between Card Street Substation in Lebanon, Lake Road Switching Station in Killingly, and the Connecticut/Rhode Island border; and associated additions and modifications at Card Street Substation, Lake Road Switching Station, and Killingly Substation in Killingly.

This D&M Plan includes construction activities associated with construction at Card Street Substation, Lake Road Switching Station and Killingly Substation. At Card Street Substation and Lake Road Switching Station, modifications are required to allow the interconnection of the new 345-kV transmission lines, approved as part of the Interstate Project, to the existing transmission lines. Killingly Substation will not be interconnected to the new 345-kV transmission lines but the new 341 Line will extend over the substation, which will require the installation of two new structures within the substation.

With the exception of the installation of a second ground-grid wire adjacent to, but outside of, the Lake Road Switching Station fence, all substation and switching station activities will be within the existing fenced portion of the stations.

In accordance with Condition (8) of the Council's D&O, CL&P will retain an independent environmental inspector, who will be subject to approval by the Council. The independent environmental inspector(s) will have formal training in civil and environmental engineering and will have the responsibility to monitor the construction of the modifications to the three substations, the new 345-kV transmission lines and related line construction including restoration. The independent environmental consultant will have the authority to stop construction practices that are inconsistent with the Council's D&O, D&M plans or would cause significant damage or disruption to the environment. The consultant will report to the Council and to the Chief Elected Official (CEO) of each municipality, or their representative on a bi-weekly basis.

Also, CL&P will assign an environmental compliance team to verify construction contractors' compliance with applicable environmental regulatory requirements and Council-approved D&M Plans. The environmental



compliance team will coordinate with the independent environmental inspector, assist CL&P in preparing required notices and reports, and provide project-specific environmental training to construction contractors.

Municipal and Other Public Consultations

Prior to submission of its Substation D&M Plan, CL&P consulted with representatives of the Towns of Lebanon and Killingly to provide the towns with information on the D&M Plan process, the equipment modifications and construction activities at the substations, and CL&P's outreach procedures and points-of-contact prior to and during construction. CL&P also issued a draft of the D&M Plan for public review and held two public open houses to allow opportunities for public comment.

CL&P consulted with the State Historic Preservation Officer (SHPO) regarding the Substation D&M Plan. SHPO confirmed that the project modifications to the two substations and the switching station will not affect archaeological or historic resources.

In mid-May 2013, CL&P mailed a postcard to residents and businesses near the stations and along the project route that invited them to participate in the D&M Plan review process.

On June 3, 2013, CL&P provided copies of the draft D&M Plan to the Chief Elected Officials (CEOs) of each town along the project route and all parties and intervenors to this proceeding. CL&P invited written comments from the CEOs and other town officials.

CL&P held two public review sessions on June 12 and June 13, 2013 in Mansfield and Brooklyn, respectively. The public review sessions were designed to solicit public input regarding the draft D&M Plans. Information about the public review sessions were sent to landowners adjacent to the stations and project route. Additionally, notifications were posted on the project website, in local newspapers, and issued to the media via a press release. Also, signs were placed at the meeting facility on the day of the event.

In May and June 2013, CL&P met with town officials for each of the 11 towns crossed by the project and with targeted stakeholders, to review the D&M Plans.

Community Outreach During the Construction Process

CL&P has conducted community outreach during the project planning and siting processes. The company will continue its outreach efforts throughout construction and will notify affected stakeholders of upcoming construction activities.

CL&P has established a project hotline (1-866-99-NEEWS) and a dedicated email address for communications with residents, businesses and other stakeholders throughout construction. CL&P has also established a project website (www.NEEWSprojects.com) to provide an overview of the project, a map of the project facilities, a project fact sheet, and CL&P contact information. After construction begins, the project website will also include regular town-by-town construction updates.

CL&P will hold briefings with landowners most affected by construction of the project and other stakeholders to provide updates on the construction progress, milestones and timelines. Project representatives will also contact adjacent landowners to discuss construction activities and questions or concerns.

Notices

In accordance with Council D&O Condition (8), the independent environmental consultant to be hired will provide the Council and the CEOs of each affected municipality with a bi-weekly report describing all significant construction activities and associated environmental effects.

CL&P will provide the Council with monthly progress reports on construction, which will include a record of any minor changes to the project.

CL&P will provide the Council with written notification at least two weeks prior to the beginning of clearing and access work; the commencement of transmission line construction; and the completion of construction (including site restoration).

Card Street Substation

Card Street Substation is an existing CL&P substation located in the northeastern corner of Lebanon. The substation occupies 10 acres of a 150-acre parcel of CL&P-owned land along Card Street. All modifications to the substation will be within the existing fenced area.

The substation property is zoned for rural residential and agricultural uses. The nearest residence is approximately 400 feet from the southern substation fence line.

Access to the site will extend from Card Street.

Modifications are required to interconnect the Substation to the new 345-kV transmission line (3271 Line). The modifications will expand the existing three-position 345-kV ring bus to a five-position ring bus. One new 345-kV transmission line-terminal position will be needed for the new 3271 Line and the splitting of the current ring bus position that supports the 330 Line and the autotransformer 5X into two separate bus positions. New equipment will be located in the southern portion of the existing substation. It will include:

- 1. Three new 345-kV circuit breakers;
- 2. One new 345-kV transmission line terminal structure (approximately 110 feet in height);
- 3. Four lightning masts (approximately 110 feet in height);
- 4. Four 345-kV disconnect switches;
- 5. 435 linear feet of 345-kV bus, and 500 feet of control-cable trench;
- 6. Three surge arresters;
- 7. Nine new coupling capacitor voltage transformers (CCVTs), six associated with the new 3271 Line and three associated with 345-kV Bus B (adjacent to the autotransformer); and
- 8. One wave trap and line tuner.

Additionally, new protection and control equipment and a new primary battery will be installed within the existing relay/control enclosure, and work will be performed to ensure that primary and backup protection and control equipment in the relay/control enclosure complies with requirements for proper separation. Several existing 345-kV disconnect switches will be replaced to increase their current-flow ratings.

CL&P will dismantle and remove five three-phase bus supports and foundations and eight one-phase bus supports and foundations from the substation.

Construction support areas will be located within the fenced portion of the existing substation. The area will be used for temporary construction office trailers, parking, material laydown, and related storage and construction support. CL&P will also use its property on the opposite side of Card Street as a supplemental staging area.

Five wetlands are located on the CL&P property but not within the fence line. Of the five, three are near the substation fence, including two east of the developed portion of the station and one southwest of the station that includes a swale extending along the southern substation fence line. No wetlands will be affected by the modifications.

The construction contractor will place construction "work zone" signs at appropriate locations along Card Street. The signs will be posted so as to be visible to those traveling in either direction along Card Street.

Erosion and sedimentation control measures will be established and maintained in accordance with NU's Best Management Practices and the Connecticut Department of Energy and Environmental Protection permit. These controls will be put around areas of disturbed soils to minimize the potential for sedimentation into nearby water resources, or off-site erosion.

Construction will conform to the Spill Prevention and Countermeasures Plan. The construction contractor will maintain appropriate and adequate supplies of spill containment and clean-up materials on-site, and will dedicate a storage area for such purposes.

Following the installation of new equipment, areas disturbed by construction within the substation will be graveled. Construction debris and temporary construction support supplies and equipment will be removed.

Lake Road Switching Station

Lake Road Switching Station is an existing switching station located on property owned by Lake Road Generating Company, L.P. at 56 Alexander Parkway in the northwestern portion of Killingly. The station is adjacent to Lake Road Generating Station and is located within an approximately 3.5 acre area of the 60-acre generating station property, owned by EquiPower Resources Corporation. The site is on an industrial property near Interstate 395 and adjacent to other commercial and industrial uses. There are no nearby residences.

All new equipment will be placed within the fenced area of the switching station. The two approved 345-kV transmission lines (the 3271 Line and the 341 Line) will interconnect to the Lake Road Switching Station. A second ground-grid wire will be buried approximately seven feet outside of the station fence on the west and north side.

CL&P will use portions of the Lake Road Generating Station property for construction staging and support.

Modifications at Lake Road Switching Station include the completion of the existing partial switchyard bay and the construction of a new partial bay to interconnect the new 345-kV lines from Lake Road to Card Street Substation (3271 Line) and Lake Road to National Grid's West Farnum Substation (341 Line). The existing 330 Line connection will be relocated to the new partial bay. The 3271 Line will be installed in the existing 330 Line position with new protective relays. New equipment will include:

- 1. Three 345-kV circuit breakers;
- 2. Six 345-kV disconnect switches;
- 3. 170 feet of 345-kV bus;
- 4. Six surge arresters;

- 5. 10 coupling capacitor voltage transformers (CCVTs);
- 6. Four potential transformers (PTs); and
- 7. Two wave traps.

Access to the switching station would extend from Alexander Parkway through Lake Road Generating Station to the switching station.

No wetlands or streams are within 200 feet of the switching station. A 0.6-acre storm water detention basin is located south of the switching station and west of the generating station, on generating station property.

Two state-listed moth species (Barrens metarranthis moth and the slender clearwing) are known to have habitat near the switching station. Modifications to the switching station are not expected to affect habitat for the two moth species.

The construction contractor will place construction "work zone" signs at appropriate locations along Alexander Parkway, near the access road for the generating station.

Limited excavation will be required for the installation of new equipment within the switching station and for the new ground-grid wire.

Erosion and sedimentation control measures will be established and maintained in accordance with NU's Best Management Practices and the Connecticut Department of Energy and Environmental Protection permit. These controls will be put around areas of disturbed soils to minimize the potential for sedimentation into nearby water resources, or off-site erosion.

Construction will conform to the Spill Prevention and Countermeasures Plan. The construction contractor will maintain appropriate and adequate supplies of spill containment and clean-up materials on-site, and will dedicate a storage area for such purposes.

Following the installation of new equipment, areas disturbed by construction within the substation will be graveled. Construction debris and temporary construction support supplies and equipment will be removed.

Killingly Substation

Killingly Substation is located at 257 Tracy Road in northern Killingly, 0.5 miles northeast of Lake Road Switching Station. The substation is located within an approximately 5.6-acre fenced area within a 29.4-acre CL&P-owned property. Access to the substation will extend from Park Road.

The substation is in an industrially-zoned area. The nearest residence is approximately 700 feet east of the substation fence line, along Tracy Road.

No new switchyard equipment will be installed within the substation. The 341 Line will be extended through the substation, requiring the installation of two new 345-kV transmission line structures. The structures will be approximately 110 feet tall and be similar in appearance to the two existing line termination structures at the substation. All construction activities will occur within the fenced portion of the existing station.

Additionally, two lightning shield wires will be removed — one between two existing 115-kV line terminal structures in the substation and the other between two existing 345-kV line structures outside the yard.

No wetlands or streams are located on the site. Two small wetland areas and a stream associated with one of the wetlands are located northeast of the substation on CL&P property near the access road to the substation. Also, a 1.3-acre storm water detention pond is located on property owned by Staples warehouse east of the substation.

The substation is near potential habitat for state-listed moths/butterflies; however, field surveys determined that the substation itself does not provide habitat for these species.

Erosion and sedimentation control measures will be established and maintained in accordance with NU's Best Management Practices and the Connecticut Department of Energy and Environmental Protection permit. These controls will be put around areas of disturbed soils to minimize the potential for sedimentation into nearby water resources, or off-site erosion.

Construction will conform to the Spill Prevention and Countermeasures Plan. The construction contractor will maintain appropriate and adequate supplies of spill containment and clean-up materials on-site, and will dedicate a storage area for such purposes.

Following the installation of new equipment, areas disturbed by construction within the substation will be graveled. Construction debris and temporary construction support supplies and equipment will be removed.

Spill Prevention and Countermeasures Plan

As part of its Substation D&M Plan, CL&P submitted a Spill Prevention and Countermeasures Plan (SPCP). The SPCP describes measures to minimize potential for a spill of petroleum products or hazardous or toxic substances and, if a spill does occur, to contain the release of the spill and minimize effects.

Snow Removal and De-Icing Procedures

Project construction will occur over a two-year period including winter, when ice and snow may occur. Ice and snow removal may be necessary to allow construction to proceed safely and will be performed to protect the environment.

Snow disposal sites will only be located in upland areas. For substation and switching station sites, snow will be removed as needed using plows or snow blowers. Snow will be stockpiled on the station site. Approved snow disposal locations will be, to the extent practicable, at least 25 feet from any water resources or catch basin and within a stabilized portion of the station sites, and must be protected with appropriate erosion and sedimentation controls as necessary. If soil or erosion controls are damaged during the snow removal and/or stockpiling process these controls will be promptly repaired.

D&M Plan Changes

All D&M Plan changes that are deemed "significant" in accordance with RCSA § 16-50j-62, will be submitted to the Council for approval prior to implementation of the change. A significant change to the project is one that would substantially reduce environmental protection, substantially increase potential public concern, or result in a meaningful effect on the environment, the public, or other project permits and approvals.

Significant change to the D&M Plan will be categorized as either "urgent" or "non-urgent." If a change is deemed urgent, and it cannot wait until the next Council meeting for consideration, CL&P will provide verbal notification of the change to Council staff and request expeditious approval of the change. If verbal permission is granted, CL&P will continue construction as stated in the approved change and file documentation regarding the change

with 48 hours. If verbal permission is not granted or if the change is not urgent, CL&P will file documentation regarding the change and hold construction on that portion of the project until the Council reviews the change.

Non-significant changes to the D&M Plan will be documented. Although changes that are not deemed significant will not submitted to the Council for approval, CL&P will document all changes in its monthly construction progress reports.

Council staff recommends that requested urgent changes be authorized by Council staff, and that the Certificate Holder submit written specifications within 48 hours after the request. All changes pursued without advance notification and approval shall be subject to a penalty, enforceable by the Attorney General.

Reports

The following reports will be provided to the Council:

- 1. A Monthly Construction Progress Report: As required by RCSA § 16-50j-62(b)(3), this report will identify changes and deviations to the approved D&M Plan.
- 2. A **Bi-Weekly Independent Environmental Inspector Report**: As required by the D&O condition 8, this report will be provided to the Council and the Chief Elected Officials of each involved town (or their designated representatives) and will describe the status of construction and environmental protection.
- 3. A Final Report: As required by RCSA § 16-50j-62(c), CL&P will provide this report to the Council no later than 180 days after completion of all site construction and rehabilitation. The report will identify:
 - a) All agreements with abutters or property owners regarding special maintenance precautions
 - b) Significant D&M Plan changes that were necessary because of property rights or underlying and adjoining owners or for other reasons.
 - c) The location of any construction materials left in place.
 - d) The location of areas where special plantings and reseeding have been performed.
 - e) The actual construction cost of the facility.
- 4. An **Operating Report**: As required by the D&O condition 9, CL&P will provide this report to the Council within three months after the conclusion of the first year of the operation of all project facilities, and annually thereafter for three years. The report will describe the overall condition, safety, reliability, and operation of the transmission systems.

Recommendations

The D&M Plan complies with requirements of RCSA § 16-50j-60 to 16-50j-62 and is consistent with the Council's D&O dated December 27, 2012. Council staff recommends approval of the D&M Plan with the following conditions:

CL&P immediately notify the Council in any case when an environmental permit is issued to CL&P by a federal and/or state regulatory agency that contains a provision inconsistent with the record in Docket 424.

CL&P provide the Council with a final report containing all agreements with abutters or other property owners regarding special maintenance precautions; significant changes to the D&M Plan that have been approved by the Council; locations of special planting and seeding; and actual construction cost of the project.

CL&P provide copies to the Council upon receipt of federal and state regulatory permits.

Urgent significant changes requested by CL&P be authorized by Council staff, and that CL&P submit written specifications within 48 hours after the request.



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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NOTICE OF SERVICE

I hereby affirm that a photocopy of this document was sent to each Party and Intervenor on the service list dated October 4, 2012, with method of service to each party and intervenor listed via e-mail and U.S. mail on September 20, 2013.

Dated: September 20, 2013

Lisa Fontaine

Custodian of Docket No. 424

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